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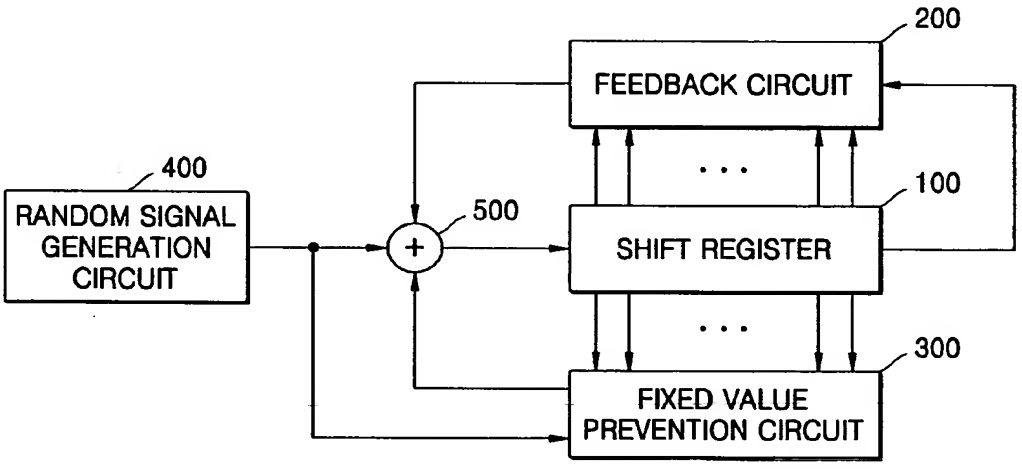
(54) Title: APPARATUS AND METHOD FOR GENERATING RANDOM NUMBER USING DIGITAL LOGIC



(57) Abstract: An apparatus and method for generating random numbers using digital logic are provided. The apparatus includes a shift register which sequentially moves bit values stored therein, a feedback circuit which performs a predetermined logic operation on the bit values stored in the shift register to generate a feedback signal, an external signal generation circuit which generates an external signal input to the shift register, and an input logic circuit which performs a predetermined logic operation on the feedback signal and the external signal and inputs a result of operation to the shift register. The method includes sequentially moving bit values stored in a shift register, (b) performing a predetermined logic operation on the bit values stored in the shift register to generate a feedback signal, (c) generating an external signal input to the shift register, and (d) performing a predetermined operation on the feedback signal and the external signal and inputting a result of the operation to the shift register.

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